REMARKS/ARGUMENTS

Reconsideration and allowance of this application are respectfully requested. Currently, claims 1-11 and 13 are pending in this application.

Priority Document:

Applicant notes with appreciation the acknowledgement of Applicant's claim for foreign priority. On September 27, 2004, Applicant filed a certified copy of application no. (EP) 98307623.3. The Office Action states "The certified copy has been filed in application no. 98307623.3, filed on 09/18/1998." Applicant respectfully requests that the next Office Action clearly acknowledge that the foreign priority document has been received in the present application (USSN 09/763,325) so that the record is clear.

Rejections Under 35 U.S.C. §102 and §103:

Claims 1, 3, 7-9 and 11 were rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Virgile (U.S. '726). Applicant respectfully traverses this rejection.

For a reference to anticipate a claim, each element must be found, either expressly or under principles of inherency, in the reference. Virgile fails to disclose each element of the claimed invention. For example, Virgile fails to disclose "a) obtaining a list of receiver identifiers, said list corresponding to the set of recipients to which said data block is to be sent; [and] b) after receiving said data block, said data block being without a corresponding multicast address, examining said one or more directories to find and obtain a multicast-address corresponding in common to said

list of receiver identifiers obtained in step a)," as required by independent claim 1 and its dependents. Independent claim 9 and its dependents require similar features.

The present invention relates to a computer which may transmit data blocks without a multicast address such as news articles relating to a specific subject to various recipients. The computer examines a directory in order to find and obtain a multicast address for the data block and transmit this data block using the multicast address.

In contrast, <u>Virgile describes receiving a data block with a multicast address assigned to it already and then using the multicast address to look up in a table the interfaces over which a data block should be transmitted</u>. This clearly differs from the invention required by claim 1 which uses a receiver identifier to obtain a multicast address with which to transmit the block. Again, the received data block in Virgile already has a multicast address assigned to it.

Section (C) (page 4) of the Office Action states "...FIG. 5 and FIG. 6 are not methods of different embodiments but functionalities of the Virgile's invention as stated by 'according to an embodiment of the present invention.'" However, if Fig. 5 were combined with Fig. 6, then a first data packet (multicast control packet in S1 of Fig. 5) has to be sent followed by a second, different, multicast message packet (S16 of Fig. 6) in order to update and then transmit the multicast message packet. In contrast, the present invention relates to the transmission of a single data block as set out in steps a)-d) of claim 1.

Dependent claim 3 further relates to combining directories held at different computers which are consolidated by the main or higher level computer into a higher level consolidated list of receiver identifiers. In particular, claim 3 requires "determining that a general data block is to be sent to recipients included in one or more of a selected plurality of said lists." The "selected plurality of lists" correspond to the lists held at the site level computers (see, e.g., Figs. 5A-5C in the present application), which are then consolidated by the main computer P into a directory (see Fig. 6) by "unifying said selected plurality of lists to find a unified list of receiver identifiers" as further required in step b) of claim 3.

While the Office Action alleges that Fig. 4 of Virgile discloses the features of claim 3, Fig. 4 is merely a table and does not disclose any specific steps as defined in claim 3. If the Office Action maintains the position that the table of Fig. 4 discloses the steps of claim 3, Applicant respectfully requests that the next Office Action clarify specifically how this is accomplished.

With reference to dependent claim 7, Virgile fails to disclose a plurality of group directories as defined. The Office Action previously equated each row of the table in Fig. 4 of Virgile to "a list" as defined in the claims. The table itself can therefore only represent a single directory, which is defined as storing a "plurality of lists" in claim 1. As such, Fig. 4 of Virgile cannot also disclose "a plurality of group directories" as further defined in claim 7.

Accordingly, Applicant submits that claims 1, 3, 7-9 and 11 are not anticipated by Virgile and respectfully requests that the rejection of these claims under 35 U.S.C. §102(b) be withdrawn.

Claim 2 was rejected under 35 U.S.C. §103 as allegedly being unpatentable over Virgile in further view of Takiyasu et al (U.S. '947, hereinafter "Takiyasu"). Applicant respectfully traverses this rejection. Since claim 2 depends from claim 1, all of the comments made above with respect to Virgile as applied to claim 1 apply equally to claim 2. Takiyasu fails to remedy the above described deficiencies of Virgile.

Dependent claim 2 relates to retransmission of unsuccessfully transmitted data blocks based on multicast transmission to the unsuccessful recepients, Takiyasu merely suggests resending the multicast information using "the same retransmitting operation as mentioned above" (col. 7, lines 4-5). The operation described "above" is a standard multicast operation. Thus, Takiyasu suggests detecting a failed transmission and resending the same multicast message to the same recipients. There is no suggestion in Takiyasu of "analysing said indications <u>to generate a list of receiver identifiers</u>, each receiver identifier in said list identifying a recipient that did not successfully receive said earlier data block" as defined in step b) of claim 2. The list of receiver identifiers is used in exemplary embodiments of the present invention to resend the multicast data block to only those receivers identified by the identifiers, thus reducing the amount of resend traffic.

Accordingly, Applicant respectfully requests that the rejection of claim 2 under 35 U.S.C. §103 be withdrawn.

Claims 4-6 and 10 were rejected under 35 U.S.C. §103 as allegedly being unpatentable over Virgile in view of Reams (U.S. '793). Applicant respectfully traverses this rejection. Since claims 4-6 depend at least indirectly from independent base claim 1 and claim 10 depends from independent base claim 9, Applicant submits that the above comments made with respect to Virgile as applied to base claims 1 and 9 apply equally to claims 4-6 and 10. Reams fails to remedy the above described deficiencies of Virgile. Moreover, Applicant submits that one of ordinary skill in the art would not have been motivated to combine the teachings of Reams and Virgile. Reams is directed to controlling cable or TV broadcasts on an individual basis, and not to transmitting data blocks in a multicast-network as in Virgile. Applicant therefore submits that Virgile and Reams are non-analogous art and thus the combination thereof is improperly based on hindsight. Evidence of the non-analogous nature between Virgile and Reams can be ascertained through the respective U.S. Classifications and fields of search printed on these U.S. Patent documents which are mutually exclusive of each other.

Accordingly, Applicant respectfully submits that claims 4-6 and 10 are not "obvious" over Virgile and Reams and respectfully requests that the rejection of these claims under 35 U.S.C. §103 be withdrawn.

New Claim:

New claim 13 has been added to provide additional protection for the

invention. New claim 13 requires, *inter alia*, "a) computer readable program code means for causing the computer to obtain a list of receiver identifiers, said list corresponding to the set of recipients to which said data block is to be sent;

b) computer readable program code means for causing the computer to, after receiving said data block, said data block being without a corresponding multicast address, examining said one or more directories to find and obtain a multicast-address corresponding in common to said obtained list of receiver identifiers." Applicant submits that new claim 13 is allowable.

Conclusion:

Applicant believes that this entire application is in condition for allowance and respectfully requests a notice to this effect. If the Examiner has any questions or believes that an interview would further prosecution of this application, the Examiner is invited to telephone the undersigned.

Respectfully submitted,

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